

Ordinary Bitter na lenia

- Gravity **13.8 BLG**
- ABV **5.7 %**
- IBU **32**
- SRM **8.8**
- Style **Specialty Beer**

Batch size

- Expected quantity of finished beer **20 liter(s)**
- Trub loss **5 %**
- Size with trub loss **21 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **25.3 liter(s)**

Mash information

- Mash efficiency **75 %**
- Liquor-to-grist ratio **3.5 liter(s) / kg**
- Mash size **19.6 liter(s)**
- Total mash volume **25.2 liter(s)**

Steps

- Temp **65 C**, Time **90 min**

Mash step by step

- Heat up **19.6 liter(s)** of strike water to **71.4C**
- Add grains
- Keep mash **90 min** at **65C**
- Sparge using **11.3 liter(s)** of **76C** water or to achieve **25.3 liter(s)** of wort

Fermentables

Type	Name	Amount	Yield	EBC
Grain	Strzegom Pilzneński	5 kg (89.3%)	80 %	4
Grain	Karmelowy Czerwony	0.5 kg (8.9%)	75 %	59
Grain	Strzegom Czekoladowy jasny	0.1 kg (1.8%)	68 %	400

Hops

Use for	Name	Amount	Time	Alpha acid
Boil	Challenger	30 g	60 min	7.3 %
Boil	Fuggles	15 g	15 min	5.9 %
Boil	East Kent Goldings	15 g	15 min	3.7 %
Boil	Cascade	20 g	2 min	6.9 %

Yeasts

Name	Type	Form	Amount	Laboratory
Safale US-05	Ale	Dry	11.5 g	Fermentis